

08CL7174-16

**REMARKS**

Claims 1-16 are pending in the present Application. Claims 6-13 are currently withdrawn from consideration. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

**Claim Rejections Under 35 U.S.C. § 103(a)**

Claims 1-5 and 14-16 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over U.S. Patent No. 5,576,256 to Monque. In the Advisory Action the Examiner asserted that the Applicants had not presented evidence showing that the claimed temperature difference was critical. Applicants respectfully traverse this rejection.

The pending claims require that the temperature of the second calcination step be at least 100°C greater than the temperature of the first step, as taught in the Examples. It is clear from the data disclosed in the Examples that the increase in temperature in the second step is essential for improving catalyst performance.

Example 1 demonstrates the unexpectedly good conversion, yield and deactivation of catalysts treated with the high temperature second step. The catalysts used in the Example are first treated at 350°C for 5 hours then each catalyst is treated at a different temperature. The control catalyst, (Table 1, first row), is heated at 350°C for an additional two hours and demonstrates 10% conversion, 9.7% yield and a 50% deactivation. In contrast, the remaining catalysts were treated with a second high temperature step (Table 1, rows 2-6). For these non-control catalysts the temperature of the second high temperature step is at least 100°C greater than the first step. These non-control catalysts demonstrate an improvement in conversion of at least 20%, an improvement in yield of at least 17% and an improvement in deactivation of at least 16%. The best results are obtained when the temperature of the second high temperature step is 920°C. This catalyst demonstrated an improvement of 260% in conversion, 263% in yield and 78% in deactivation.

Example 2 similarly compares catalysts that were treated with a second high temperature step (Table 2, rows 2-6) to a control catalyst (Table 2, row 1) with similar results. The catalyst treated at a temperature of 920°C for the second high temperature step

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demonstrates the best results, namely an improvement of 23% for conversion, 150% for selectivity, 210% for yield and 54% for deactivation. Clearly the higher temperature of the second step is critical to the process and yields unexpectedly good results.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 07-0862.

Respectfully submitted,

CANTOR COLBURN LLP

By *Patricia S. DeSimone*  
Patricia S. DeSimone  
Registration No. 48,137

Date: February 7, 2005  
Telephone (860) 286-2929  
Facsimile (860) 286-0115  
Customer No.: 43248